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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,441	11/07/2001	Heinz Fabian	52201-0607	4283

7590

08/08/2003

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EXAMINER

MEEKS, TIMOTHY HOWARD

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 08/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/045,441

Applicant(s)

FABIAN, HEINZ

Examiner

Timothy H. Meeks

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-39 is/are pending in the application.
- 4a) Of the above claim(s) 31-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 18-39 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 18-30 drawn to method, classified in class 65, subclass 421
- II. Claims 31-39, drawn to an apparatus classified in class 118, subclass 715.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus could be used to deposit materials other than silica.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Andrew Tiajolloff on 03 July 2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 18-30.

Affirmation of this election must be made by applicant in replying to this Office action. Claims 31-39 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 18-30 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 10/045,339. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of '339 require varying the width of the flame with a geometrical parameter of the deposition surface which would be inclusive of a relative location of the deposition burner relative to the blank.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18-26 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 98/03441

WO 98/03441 discloses a process for producing a SiO<sub>2</sub> blank comprising forming silica particles in a burner flame associated with one or more deposition burners, depositing the silica particles under the effect of an electrical field on a deposition surface of a carrier rotating about a longitudinal axis thereof, the deposition burner being supported for relative longitudinal reciprocation relative with respect to the developing blank between turn-around points thereon (English translation at pages 4-9). WO 98/03441 further discloses at page 11 of the English translation that the voltage forming the electrical field is increased over time intervals dependent upon the diameter of the growing blank so as to prevent a slowing of the deposition rate caused by charging of the blank over time. The increased voltage applied to the electrical field must inherently change the shape of the flame as the particles of the flame will be accelerated with the increased voltage (energy) imparted thereto. This change in shape also is performed relative to the location with respect to the blank as this location will change as the diameter of the blank grows. With respect to claims 19-20, the change of shape of the flame will inherently involve a change in both widths of the flame as the voltage is increased. Also, with respect to claim 20, the voltage will need to be changed at the turn-around points to maintain homogeneity of the field across the longitudinal axis of the blank as required in WO 98/03441, as such the width would be varied at these points as well.

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Claims 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishida et al. (6,003,342)

Ishida discloses a process for producing a silica blank comprising forming silica particles in a burner flame associated with a deposition burner, depositing the silica particles under the effect of an electrical field on a deposition surface of a carrier rotating about a longitudinal axis thereof, the deposition burner being supported for relative longitudinal reciprocation relative with respect to the developing blank between turn-around points thereon. The voltage applied to the electrical field is increased at the turn-around points so as to increase the deposition rate in these areas (col. 20, line 28 to col. 21, line 38, figures 27 and 28). The increased voltage applied to the electrical field must inherently change the shape of the flame as the particles of the flame will be accelerated with the increased voltage (energy) imparted thereto. With respect to claims 19-20, the change of shape of the flame will inherently involve a change in both widths of the flame as the voltage is increased.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/03441.

WO 98/03441 does not explicitly disclose that the electrical field is adjusted to avoid a gas discharge. However, as WO 98/03441 discloses that the electrical field is to be applied after the particles are formed a gas discharge would destroy (by decomposition) the formed particles,

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hence reducing or destroying the efficiency of the process, it would have been obvious to adjust the electrical field to prevent gas discharge to avoid decomposition of the formed particles in such discharge.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishida et al.

Ishida does not explicitly disclose that the electrical field is adjusted to avoid a gas discharge. However, as Ishida discloses that the electrical field is to be applied after the particles are formed a gas discharge would destroy (by decomposition) the formed particles, hence reducing or destroying the efficiency of the process, it would have been obvious to adjust the electrical field to prevent gas discharge to avoid decomposition of the formed particles in such discharge.

#### ***Allowable Subject Matter***

Claims 27-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

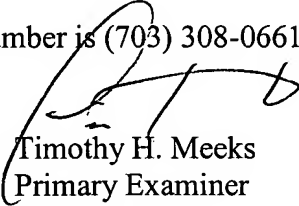
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 58-217448 and JP 56-054242 cited for their disclosure of applying an electrical field to a burner flame for soot deposition.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy H. Meeks whose telephone number is (703) 308-3816. The examiner can normally be reached on Mon., Tues., Thurs.(6-6:30), Fri.(6:30-10:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P. Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Timothy H. Meeks  
Primary Examiner  
Art Unit 1762

nf  
August 4, 2003